Appendix H

95% Upper Confidence Limit Calculations
for Building 52 Lobe Soil Samples

The following table shows summary statistics used for the Upper Confidence Limit (UCL) calculation for residual cis-1,2-DCE and PCE in soil samples collected from the Building 52 lobe soil excavation ICM area.

Summary Statistics for Residual Soil Samples Building 52A Soil Excavation ICM Area (mg/kg)

Chemical	Detection Frequency		Percent Detects	Range of Values, mg/kg Detected Concentrations Minimum	Maximum	Detection Limits	Mean mg/kg	Standard Deviation	Percentile Bootstrap 95%-UCL mg/kg
cis-1,2-DCE	16	79	20	0.0058	0.25	0.05	0.0087	0.0291	0.014
PCE	36	79	46	0.0052	0.73	0.005	0.0458	0.1203	0.070

Due to the low detection rates for these analytes, it is likely that the true mean is lower than the estimated UCL. Using the "Percentile Bootstrap" method (used in the HHRA and specified in the CMS workplan), the estimated 95%-UCLs, shown in the following table, are substantially lower than the target risk-based or regulatory-based soil MCSs.

95% Upper Confidence Limit on the Arithmetic Mean for Soil Sample Data Building 52A Soil Excavation ICM Area

Chemical	Bootstrap 95%-UCL (mg/kg)	MCS* (mg/kg)
cis-1,2-DCE	0.014	0.19
PCE	0.070	0.45

*Lesser of target risk-based MCS and regulatory-based MCS.